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Neuromuscular Recovery Scale

Availability:	Copyrighted via publication. Available in Behrman et al., 2012 and Harkema, et al., 2012. Neuromuscular Recovery Scale Instrument Link
Classification:	**Exploratory**: Spinal Cord Injury (SCI) and SCI-Pediatric (over 12 years old)
Short Description of Instrument:	**Construct measured:** Function, neuromuscular recovery **Generic vs. disease specific**: Disease specific **Intended respondent:** Participant
Comments/Special instructions:	**Scoring:** Each task (item) is scored on a scale from the lowest level of capacity or neuromuscular recovery (1A) to the highest level of capacity (4C) with 12 possible scores per item. An overall score is calculated, as well as "lagging" items or the lowest scoring items. **Background:** The Neuromuscular Recovery Scale (NRS) is a classification of neuromuscular recovery after adult spinal cord injury based on an individual's capacity to perform functional tasks without compensation (e.g., braces, physical assist, and assistive devices). The scale compares the participant's performance to how the task would have been performed on day prior to injury. Psychometric studies in adults show: Strong test-retest (r=+>0.92); inter-rater reliability (W=0.82–0.89) and better responsiveness than comparative measures. SCI-Pediatric-specific: The NMR Scale is not indicated for youth 12 years old and younger. Work is under way to develop a pediatric version (see Pediatric Neuromuscular Recovery Scale).
References:	Basso, D. M., C. Velozo, D. Lorenz, S. Suter and A. L. Behrman (2015). Interrater reliability of the Neuromuscular Recovery Scale for spinal cord injury. Arch Phys Med Rehabil 96(8): 1397–1403. Behrman, A. L., E. Ardolino, L. R. Vanhiel, M. Kern, D. Atkinson, D. J. Lorenz and S. J. Harkema (2012). Assessment of functional improvement without compensation reduces variability of outcome measures after human spinal cord injury. Arch Phys Med Rehabil 93(9): 1518–1529. Harkema, S., A. Behrman and H. Barbeau (2012). Evidence-based therapy for recovery of function after spinal cord injury. Handb Clin Neurol 109: 259–274. Tester, N. J., D. J. Lorenz, S. P. Suter, J. J. Buehner, D. Falanga, E. Watson, C. A. Velozo, A. L. Behrman and D. Michele Basso (2015). Responsiveness of the Neuromuscular Recovery Scale During Outpatient Activity-Dependent Rehabilitation for Spinal Cord Injury. Neurorehabil Neural Repair. In Press.